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10/663,406

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Deepak Ayyagari

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EXAMINER

WILSON, ROBERT W

ART UNIT

PAPER NUMBER

2619

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/663,406	Applicant(s) Ayyagari, Deepak	
	Examiner ROBERT W. WILSON	Art Unit 2619	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5-29 is/are pending in the application.
- 4a) Of the above claim(s) 1, 2 and 17-27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3, 5-16, & 28-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-2 & 17-27 are drawn to CAC, classified in class 370 subclass 230 (Group I)
 - II. Claims 3-16 are drawn to Multicasting or Broadcasting, classified in class 370, subclass 390 (Group II)
2. Inventions CAC and Multicasting or Broadcasting are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different designs, modes of operation, and effects (MPEP § 802.01 and § 806.06). In the instant case, the different inventions CAC and Multicasting or Broadcasting are unrelated because one would not have search for multicasting or broadcasting when searching CAC.
3. Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction is not required because the inventions require a different field of search (see MPEP § 808.02), restriction for examination purposes as indicated is proper.
4. Newly submitted claims 23-27 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: The newly added claims 23-27 are drawn to a CAC which is distinct from the previously elected group of multicasting and broadcasting. The claims 1-2 and 17-22 had previously been withdrawn due to election associated with a previous restriction.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 23-27 are withdrawn from consideration as being directed to a non-elected invention. Please note that claims 1-2 and 17-22 had been previously withdrawn. See 37 CFR 1.142(b) and MPEP § 821.03.

Specification

5. . The disclosure is objected to because of the following informalities: The Related Applications section of the specification on Pg 1 lines 5 to 10 needs to be updated to cite missing Co-pending application information. Appropriate correction is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 3-12 are rejected under 35 U.S.C. 102(E) as being anticipated by Hundscheidt (Patent Pub. No.: US2004/0233907)

Referring claim 3, Hundscheidt teaches: A method of establishing communications in a centralized network (Figure 1 performs the method), the method comprising:

determining that a connection needs to be established in response to receiving a request for a connection from an application in a device in the centralized network (The GGSN receives a PDP context activate and request to join a multicast from a mobile per Pg 8 Para [0112]) The

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Mobile station has a user which utilize application or software on the mobile requests to join a TLMG. The examiner interprets the mobiles in conjunction with the GGSN as a centralized network .)

generating a connection type and a connection specification(The GGSN determines a multicast connection needs to be determined to be established upon receipt of request from a mobile. The GGSN looks up TLMG (multicast group connection type) requested by the mobile which has a service class or connection specification per Fig 7)

requesting a connection from a central coordinator (Mobile requests joining in a multicast group from the GGSN or central coordinator per Pg 8 Para [0112])

if the connection is granted, associate a connection identifier with an originating service access point; and

associate predefined parameters with the connection identifier (GGSN grants the mobile joining the TLMG group. The mobile is associated with an access point via the SGSN and has predefined class service parameters per Fig 7)

In addition Hundscheidt teaches

Regarding claim 5, determining that a connection needs to be established further comprising determining that a connection does not exist and automatically establishing a connection (GGSN determines from the join request that the mobile is not already in the TLMG or not and automatically establishes a connection per Pg 8.)

Regarding claim 6, generating a connection type further comprising generating a connection type based upon a service access point of an application (The connection ID is translated to a connection by the SGSN based upon the mobile id or generating a connection type based upon the service access point per Pg 8)

Regarding claim 7, generating a connection type including:

Identifying a service access point of the requesting application and generating further comprising generating a connection type based upon message received from an application requesting the traffic flow (The GGSN is the service access point which is requested by software or application in the mobile which requests a TLMG or connection type message per Pg 8)

Regarding claim 8, further comprising requesting a connection selected from the group comprising: continuous grant service, periodic grant service (Mobile station is a part of the connection unit until disassociation requested per Pg 8) and a periodic grant service

Regarding claim 9, requesting a connection further comprising requesting a connection from the group comprising unicast (Fig 16) , multicast (Fig 16) , and broadcast

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Regarding claim 10, generating a connection specification further comprising generating a connection specification based upon information within protocols (The service class or connection specification per Fig 7 is based upon streaming, interactive, background or information within protocols)

Regarding claim 11, generating a connection specification further comprising generating a connection specification based upon a direction specification from an application (Requesting to join a TLMG inherently specifies a specification for streaming, interactive or background per Fig 7 per the application)

Regarding claim 12, generating a connection type further comprising generating a connection type as one of the group comprised of continuous grant service, periodic grant service (Mobile station is a part of the connection unit until disassociation requested per Pg 8) and a periodic grant service

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hundscheidt (Patent Pub. No.: US2004/0233907) in view of Nguyen (U.S. Patent No.: 5,570,359)

Referring claim 13, Hundscheidt teaches: A method of establishing multicast connection in a centralized communication system (The method is performed per Fig 1 and per Pg 11 Para [0146] to Pg 12 Para[0160]) the method comprising:

Creating multiple point-to-point connection between a source device and at least two destination devices (Inherent source in the Multimedia IP Network per Fig 1 sends packets to the combination of GGSN and SSGN to at least two MS which are members of a TLMG per Pg 11 Para [0146] to Pg 12 Para[0160])

Replicating application data such that a replica exists for each destination device and transmitting the replicas on the point-to-point connection (The combination of GGSN & SSGN translate a multicast address to the address of the mobile station and replicate each of the packets

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on a point-to-point connection with the mobile station per Pg 11 Para [0146] to Pg 12 Para [0160])

Each connection is assigned a connection identifier that is globally unique throughout the centralized network for user in routing data packets from the source device to selected ports in the destination device (Multicast address is the globally unique address)

Hundscheidt does not expressly call for: wherein each connection is associated with a corresponding service access point of a transport layer and each connection is associated with a corresponding transport layer port layer of the source device.

Nguyen teaches: wherein each connection is associated with a corresponding service access point of a transport layer (col. 2 line 5 to col. 3 line 15) and each connection is associated with a corresponding transport layer port layer of the source device (col. 2 line 5 to col. 3 line 15).

It would have been obvious to one of ordinary skill in the art at the time of the invention to add wherein each connection is associated with a corresponding service access point of a transport layer and each connection is associated with a corresponding transport layer port layer of the source device of Nguyen to the system of Hundscheidt because Nguyen describes the process performed from layer 7 to layer 4 and Hundscheidt describes the processing from layer 3 to layer 1 thereby making the processing complete from the application layer to the physical layer.

In addition Hundscheidt teaches:

Regarding claim 14, wherein at least two devices comprises less than all possible destination devices (Fig 16 shows more than two Mobile stations)

Regarding claim 15, wherein at least two devices comprises less than all possible devices (Fig 16 shows that a TLMG can inherently comprise two mobile stations or devices which are less than the total number of mobile station or devices in the network)

10. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Birdwell (U.S.

Patent No.: 6,041,359) in view of Sloan (U.S. Patent No.: 5,928,324)

Referring to claim 16, Birdwell teaches: A method of establishing a broadcast message in a centralized network (The method is performed by the system in Fig 1 and per col. 7 lines 17 to col. 8 lines 9) , the method comprising:

Requesting a bandwidth allocation from a central coordinator (The Content Server sends a bandwidth reservation request to the Broadcast center (Central Coordinator) per Fig 1 and per col. 7 lines 17 to col. 8 lines 9)

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Receiving an indication of bandwidth allocation on a dedicated broadcast channel (The Broadcast Center receives a bandwidth reservation request which includes bandwidth required as for dedicated broadcast channel to the Clients within the centralized network per Fig 1 and per col. 7 lines 17 to col. 8 lines 9)

Transmitting a broadcast message according to the bandwidth allocation on the dedicated broadcast channel of the centralized network so that the message travels directly across the network from the transmitting device to every other device on the centralized network (The Broadcast center converts the network packets into broadcast form and signal generator generates the broadcast signals or adds information required to process the received message and per col. 7 lines 17 to col. 8 lines 9)

Birdwell does not expressly call for: centralized network without traversing an intermediary broadcast facility.

Sloan teaches: integrating client and servers (col. 6 lines 45 to 50) which would result in centralized network without traversing an intermediary broadcast facility.

It would have been obvious to add integrating client and server which would result in centralized network without traversing an intermediary broadcast of Sloan in place of the separate clients and servers of Birdwell in order to build a firewall within the server function which would provide additional security to the network.

11. Claim 28 & 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Birdwell (U.S. Patent No.: 6,041,359) in view of Sloan (U.S. Patent No.: 5,928,324) further in view of Melliar-Smith (U.S. Patent No.: 5,216,675)

Referring to claims 28, the combination of Birdwell and Sloan teach: A method of establishing a broadcast message according to claim 16 and receiving the broadcast message in a destination device on the centralized network

The combination of Birdwell and Sloan do not expressly call for: sending an acknowledgement to the transmitting device.

Melliar-Smith teaches: sending an acknowledgment to the transmitting device (col. 2 lines 3 to 18)

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It would have been obvious to add the sending an acknowledgment to the transmitting device of Melliars-Smith upon receipt of the broadcast message of the combination of Birdwell and Sloan in order to increase the reliability of the system.

Referring to claim 29, the combination of Birdwell, Sloan, and Melliars-Smith teach: A method of establishing a broadcast message according to claim 28 and receiving acknowledgment message from other devices in the centralized network which are associated with the received acknowledgment message with the broadcast message.

The combination of Birdwell and Sloan do not expressly call for: determining whether or not to re-try transmitting the broadcast message.

Melliars-Smith teaches: determining whether or not to re-try transmitting the broadcast message (If ack not received before timeout then retry per col. 2 lines 3 to 18)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the determining whether or not to re-try transmitting the broadcast message of Melliars-Smith to the acknowledgement broadcast message system of the combination of Birdwell, Sloan, and Melliars-Smith in order to build a system which improved the reliability.

Claim Objections

11. Claims 28-29 are objected to because of the following informalities: The examiner objects to claim 28 because of optional claim language. For purpose of examination the examiner assumed that the optional limitation was mandatory. The examiner objects to claim 29 because this claim depends upon the optional limitation. The examiner recommends that the applicant either delete the limitations that depend upon the previous optional limitation or clarify the claim language. For purpose of examination the examiner assumed that the optional limitation was mandatory. Appropriate correction is required.

Response to Amendment

12. Applicant's arguments filed 2/9/08 have been fully considered but they are not persuasive.

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The examiner respectively disagrees with the applicant argument that the reference ,Hundscheidt, does not expressly call for: receiving a request for a connection from an application in a centralized network

Hundscheidt teaches: receiving a request for a connection from an application in a centralized network (The GGSN receives a PDP context activate and request to join a multicast from a mobile per Pg 8 Para [0112]). The Mobile station has a user which utilizes an application or software. The mobile requests to join a TLMG. The examiner interprets the mobiles in conjunction with the GGSN as a centralized network. The GGSN looks up TLMG (multicast group connection type) requested by the mobile which has a service class or connection specification per Fig 7 Mobile requests joining in a multicast group from the GGSN or central coordinator per Pg 8 Para [0112])

The examiner further points out that no where in the applicant's claim is a centralized network defined as a single central controller; consequently, any argument that any of the reference need to teach a single central controller are not persuasive because a single central controller is not a claimed limitation.

The examiner further points out that no where in the applicant's claim language is service access point that is specific to a type of data defined in the claim language; consequently, any argument that any of the reference need to teach a service access point that is specific to a type of data are not persuasive because a service access point that is specific to a type of data is not a claimed limitation.

The examiner disagrees with the applicant's argument the mobile station does not have an applicant present on the mobile station. The mobile station has a user. The mobile station also has software or an application.

The examiner disagrees with the applicant argument that leaving a group is indeed the same as breaking a connection. How can a connection be made to a user which is no longer a part of a group?

Relative to claim 13, the applicant has added new limitations or new scope which required a new reference. Please refer to the above rejection for details.

Relative to claim 16, the applicant has added new limitations or new scope which require a new reference refer to the above rejection for details.

The applicant added claims 17 to 23 which are distinct from broadcast or multicasting. These claims were restricted and withdrawn from consideration based upon previous presentation.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert W. Wilson whose telephone number is 571/272-3075. The examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edan Orgad can be reached on 571/272-7884. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Robert W Wilson/
Primary Examiner, Art Unit 2619

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